

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-8. (Canceled)

9. (Currently amended) A laser processing machine for processing workpieces using a laser beam, the laser processing machine comprising:

a telescope for widening and focusing a laser beam, the telescope comprising:

an ellipsoidal mirror having a first axis of rotation and a first surface that lies on an ellipse having two foci; and

a paraboloidal mirror having a second axis of rotation that is parallel to the first axis of rotation and a second surface that lies on a parabola having a focus that coincides with one of the foci of the ellipse; and

a mirror positioned to adjust [[an]] the optical axis of [[a]] the laser beam within entering the telescope such that the parallel to an optical axis of [[a]] the laser beam exiting the telescope is parallel with the optical axis of the laser beam entering the telescope.

10. (Previously presented) The laser processing machine of claim 9, wherein the second axis of rotation is collinear with the first axis of rotation.

11. (Currently amended) [[The]] A laser processing machine of claim 9 for processing workpieces using a laser beam, the laser processing machine comprising:

a telescope for widening and focusing a laser beam, the telescope comprising:

an ellipsoidal mirror having a first axis of rotation and a first surface that lies on an ellipse having two foci; and

a paraboloidal mirror having a second axis of rotation that is parallel to the first axis of rotation and a second surface that lies on a parabola having a focus that coincides with one of the foci of the ellipse; and

a mirror positioned to adjust an optical axis of a laser beam entering the telescope parallel to an optical axis of a laser beam exiting the telescope;

wherein the telescope is adapted for movement parallel to the optical axis of the laser beam that enters the telescope without altering an alignment of the laser beam entering the telescope.

12. (Previously presented) The laser processing machine of claim 9, wherein the ellipsoidal mirror and the paraboloidal mirror are fixed in position relative to each other.

13. (Previously presented) The laser processing machine according to claim 12, further comprising a common carrier element upon which the ellipsoidal mirror and the paraboloidal mirror are mounted in a fixed relationship to each other.

14. (Previously presented) The laser processing machine of claim 9, wherein the mirror positioned to adjust an optical axis of a laser beam entering the telescope is a planar mirror.

15. (Currently amended) A telescope for widening and focusing a laser beam, the telescope comprising:

an ellipsoidal mirror having a first axis of rotation and a first surface that lies on an ellipse having two foci;

a paraboloidal mirror having a second axis of rotation that is parallel to the first axis of rotation and a second surface that lies on a parabola having a focus that coincides with one of the foci of the ellipse; and

a mirror positioned to adjust [[an]] the optical axis of [[a]] the laser beam within entering the telescope such that the parallel to an optical axis of [[a]] the laser beam exiting the telescope is parallel with the optical axis of the laser beam entering the telescope.

16. (Previously presented) A telescope of claim 15, wherein the second axis of rotation is collinear with the first axis of rotation.

17. (Currently amended) A telescope of claim 15 for widening and focusing a laser beam, the telescope comprising:

an ellipsoidal mirror having a first axis of rotation and a first surface that lies on an ellipse having two foci;

a paraboloidal mirror having a second axis of rotation that is parallel to the first axis of rotation and a second surface that lies on a parabola having a focus that coincides with one of the foci of the ellipse; and

a mirror positioned to adjust an optical axis of a laser beam entering the telescope parallel to an optical axis of a laser beam exiting the telescope,

wherein the telescope is adapted for movement parallel to the optical axis of the laser beam that enters the telescope without altering an alignment of the laser beam entering the telescope.

18. (Previously presented) A telescope of claim 15, wherein the ellipsoidal mirror and the paraboloidal mirror are fixed in position relative to each other.

19. (Previously presented) A telescope of claim 18, further comprising a common carrier element upon which the ellipsoidal mirror and the paraboloidal mirror are mounted in a fixed relationship to each other.

20. (Previously presented) A telescope of claim 15, wherein the mirror positioned to adjust an optical axis of a laser beam entering the telescope is a planar mirror.

21. (Previously presented) The laser processing machine of claim 9, wherein the ellipsoidal mirror has a mirror surface shaped as an ellipsoidal segment.

22. (Previously presented) The laser processing machine of claim 9, wherein the ellipsoidal mirror is concave.

23. (Previously presented) The laser processing machine of claim 9, wherein the paraboloidal mirror is convex.

24. (Previously presented) The laser processing machine of claim 9, wherein the paraboloidal mirror is concave.

25. (Previously presented) A telescope of claim 15, wherein the ellipsoidal mirror has a mirror surface shaped as an ellipsoidal segment.

26. (Previously presented) A telescope of claim 15, wherein the ellipsoidal mirror is concave.

27. (Previously presented) A telescope of claim 15, wherein the paraboloidal mirror is convex.

28. (Previously presented) A telescope of claim 15, wherein the paraboloidal mirror is concave.

29. (New) The laser processing machine of claim 9, wherein the mirror is positioned to adjust the optical axis of the laser beam that impinges upon the mirror such that the optical axis of the laser beam impinging upon the mirror and the optical axis of the laser beam exiting the telescope are both parallel with the telescope axis.

30. (New) The telescope of claim 15, wherein the mirror is positioned to adjust the optical axis of the laser beam that impinges upon the mirror such that the optical axis of the laser beam impinging upon the mirror and the optical axis of the laser beam exiting the telescope are both parallel with the telescope axis.

31. (New) The laser processing machine of claim 11, wherein the second axis of rotation is collinear with the first axis of rotation.

32. (New) The laser processing machine of claim 11, wherein the ellipsoidal mirror and the paraboloidal mirror are fixed in position relative to each other.

33. (New) The laser processing machine of claim 11, wherein the mirror positioned to adjust an optical axis of a laser beam entering the telescope is a planar mirror.

34. (New) The laser processing machine of claim 11, wherein the ellipsoidal mirror has a mirror surface shaped as an ellipsoidal segment.

35. (New) The telescope of claim 17, wherein the second axis of rotation is collinear with the first axis of rotation.

36. (New) The telescope of claim 17, wherein the ellipsoidal mirror and the paraboloidal mirror are fixed in position relative to each other.

37. (New) The telescope of claim 17, wherein the mirror positioned to adjust an optical axis of a laser beam entering the telescope is a planar mirror.

38. (New) The telescope of claim 17, wherein the ellipsoidal mirror has a mirror surface shaped as an ellipsoidal segment.